

## CLAIM

What is claimed is:

1. Multi-Axes Tool Compensation technology handles all tool compensation internal to the CNC controller.
2. Multi-Axes Tool Compensation automatically does tool gouge avoidance protection internal to the CNC controller.
3. Multi-Axes Tool Compensation automatically contains algorithms to lift the tool to safe positions when necessary.
4. Multi-Axes Tool Compensation does not depend on the CNC programmer to re-define tool position coordinates when the tool characteristics change.
5. Multi-Axes Tool Compensation allows CNC machine operators to override the pre-defined tool characteristics.
6. Multi-Axes Tool Compensation has been in development and field use since 1991 by my customers.
7. I, Gary John Corey, solely invented Multi-Axes Tool Compensation technology based on research I conducted as a CNC machinist.
8. Multi-Axes Tool Compensation is unique because it expands the tool compensation methods available to the CNC machine operator from 2D to 3D and 5 axis directly on the CNC Controller without involving the CNC programmer to re-define tool locations and offsets defined in the G code program.